

# Rabies Update Arizona



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# Rabies Statistics



- 2007: 2,534 animals submitted to ASHL
  - 2,476 tested
  - 159 positive (6.4%)
- Similar in 2006:
  - 2,598 animals submitted to ASHL
  - 2,503 tested
  - 140 positive (5.6%)

Year	Rabid Animals
2001	129
2002	143
2003	75
2004	120
2005	169
2006	140
2007	159

# Lab Confirmed Rabid Animals 2007

- 115 bats (out of 681 tested) = 16.9% pos
  - vs. 13.7% in 2006, 19% in 2005
  - Pima County- 71, Maricopa County- 16
- 13 skunks (out of 240 tested) = 5.4% pos
  - vs. 16 (6.3%) in 2006
  - 2-4 in several SE AZ counties – mild year
  - None in Flagstaff
- 24 foxes (out of 49 tested) = 49% pos
  - vs. 22 (61%) out of 36 tested in 2006
  - Gila County – 8; enzootic fox rabies
  - Greenlee County – 7; spread



# Exposures to Lab Confirmed Rabid Animals

- 55 humans & 76 domestic animals
- 27 from one bat @ elementary school, Maricopa County- April 2007
- Many more exposures to suspect rabid animals or reservoir species
- Submissions from counties (all agencies):
  - 1,052 Pima
  - 619 Maricopa
  - 100+ each Cochise, Gila, Pinal, Yavapai
  - 50-100 each Coconino, Santa Cruz

# Fox Rabies- Yavapai & Coconino Counties

- Sycamore Canyon, Soldier Pass Road, Town of Sedona, Oak Creek Canyon
- July: Bobcat walked into home with open door in northern Sedona
- Oct: Slide Rock State Park- woman sitting on bench
- April: Coconino County- fox on Hwy 60, northern side of Salt River Canyon in southern edge of White Mtns; submitted by Navajo County Health

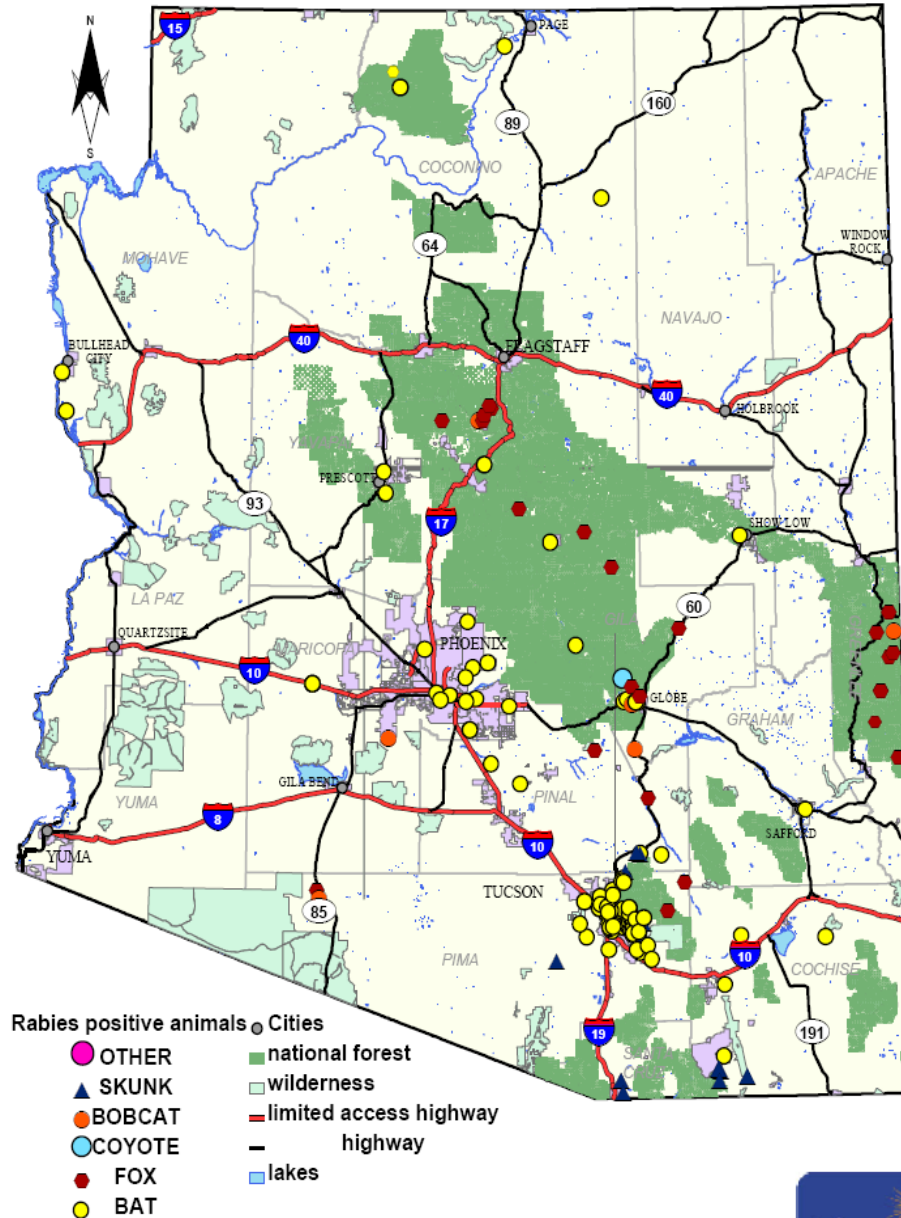


# Fox Rabies in Greenlee County

- 2007 rabid foxes, bobcat:
  - Continued spread northeast through Blue Range Primitive area & Blue River ranching community
  - Still no suspect rabid Mexican gray wolves reported
- 2008 rabid foxes in Wards Canyon in town of Clifton
  - 2006 -Eagle Creek area north of Clifton/Morenci
  - Multiple dog exposures
- Spilled over into western New Mexico- Silver City



# Rabies Positive Animals Arizona 2007



0 25 50 100 Miles

Data is provisional and subject to change.



Services



# Fox Rabies

- Bobcat & fox positive in Ajo, Pima County – few days apart
- 6 bobcats & 1 coyote (variant typing pending on several- presumed fox variant)
- Gila, Greenlee, Pima, Yavapai
- November: bobcat in southern edge of Buckeye, Maricopa County - along northern edge of National Sonoran Preserve

# Rabies in Flagstaff

- Variant associated with Big Brown Bat from western U.S. identified in skunks
- TVR in 2001
- After 3 years of no cases p/ TVR:
  - 2004 – 5 skunks (60 tested)
  - 2005 – 1 skunk (190 tested)
- **2006, 2007 & YTD 2008:  
rabid bats only**



# Lab Confirmed Rabid Animals 2008

- As of March 24th - 18 positive animals
- 1 bat, 9 skunk, 4 fox, 1 bobcat
- 1 each: coyote, coati, mtn. lion
- **Coati** from Oracle in Pinal County- on property of woman who "owns" numerous cats (some feral/stray)
  - southcentral U.S. skunk variant
- Bobcat- Schnebley Hill Rd



# 2008: Rabies in Tonto Nat'l Forest

- March: mountain lion – “attacked” 10 yr old child on beach of Verde River
- Sheep Crossing- trailhead for Mazatzal Mountains
- 9 people considered possible exposed & receiving PEP
  - Family necropsied mountain lion: 2 adults, 2 children
  - Two adults exposed to saliva only
- Additional family members vaccinated due to just concern (“what if?”s)
- AZ Gray Fox variant

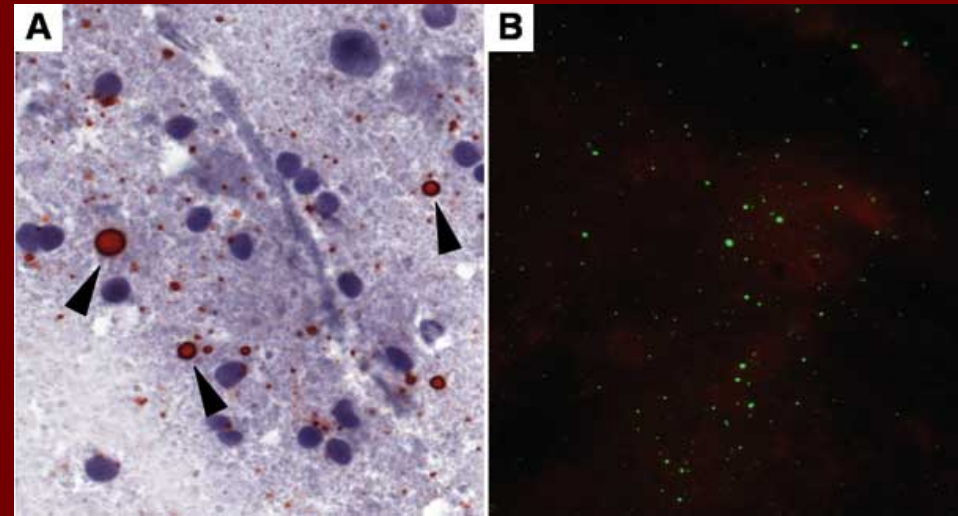


# National Media

- Today Show- flown to NY City for live interview
  - **“Boy keeps cool as mountain lion tries to eat him; Rabid carnivore claws child’s back, tries to lock jaw around his head”**
- Fox News
  - **“Arizona Boy, 10, Escapes Rabid Mountain Lion Attack With Only Scratches”**
- Inside Edition
- <http://www.msnbc.msn.com/id/23592238/>

# dRIT- Enhanced Surveillance

- Direct Rapid Immunohistochemistry Test (dRIT)
- In AZ, use by USDA APHIS Wildlife Services on select wild animals
- 30 animals tested- one fox positive (no human/pet exposure)
- USDA WS- third staff recently trained- in SE AZ







# **World Rabies Day**

## **September 8, 2007**

Poster Contest for  
Arizona School Children



Office of Infectious Disease Services



# Prizes for Children

- **First prize: 1 year family membership to the Phoenix Zoo**
- **Classroom of the winning artist will be treated to a pizza party (limited to 40 students)**
- **2<sup>nd</sup> prize: family pack of admission tickets to the Phoenix Zoo & plush toy**
- **3<sup>rd</sup> prize: World Rabies Day T-shirt & mug**

# Rules/Details

- Required artwork to drawn by child and be original
- Judging was completed on October 31, 2007
- Finalist posters will be used to create an educational poster targeting children

Avoid getting bitten  
by any animal.



Kevin Garcia Vasquez 8/29/07 5<sup>th</sup> Period

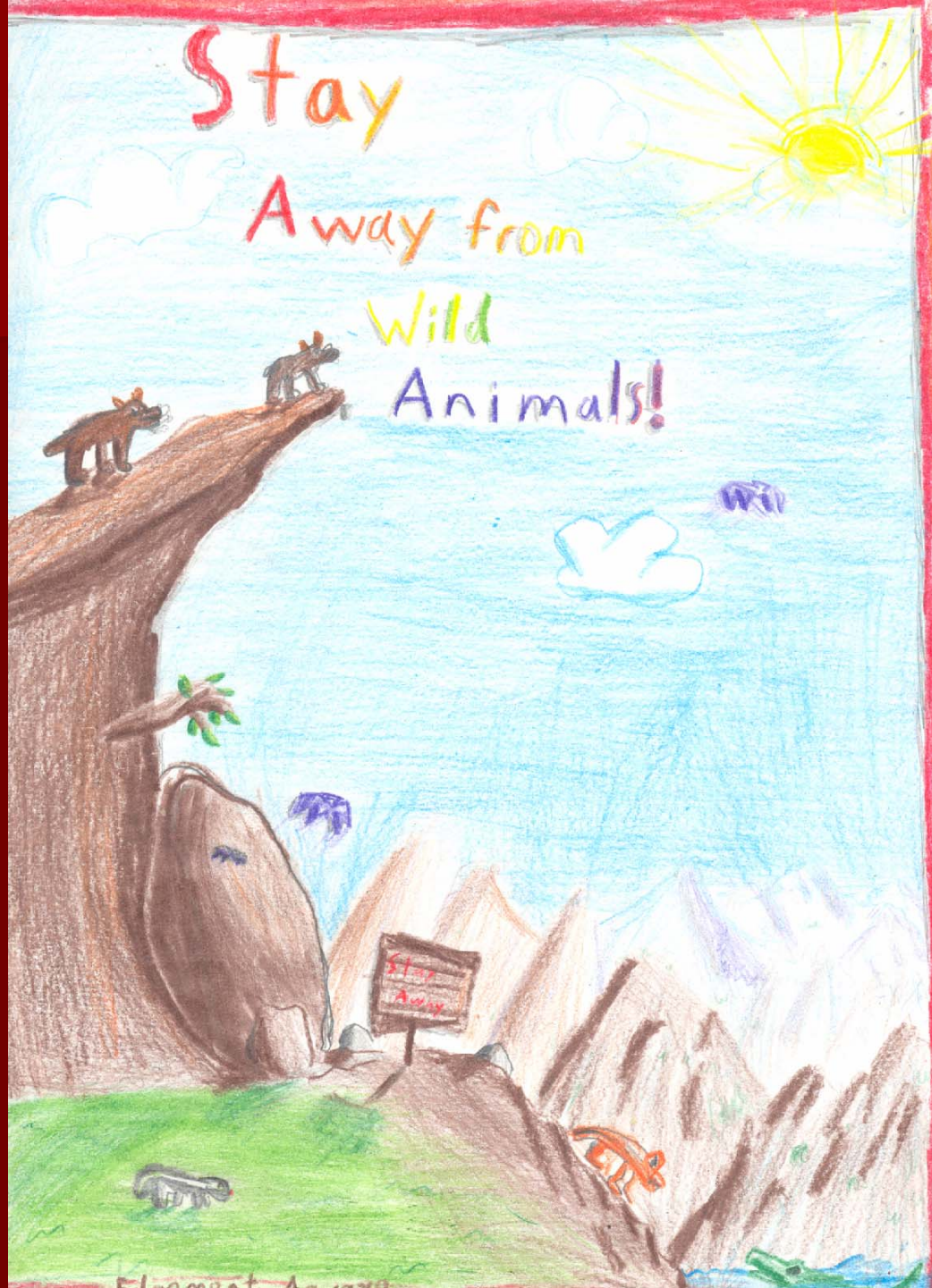
services

Stay

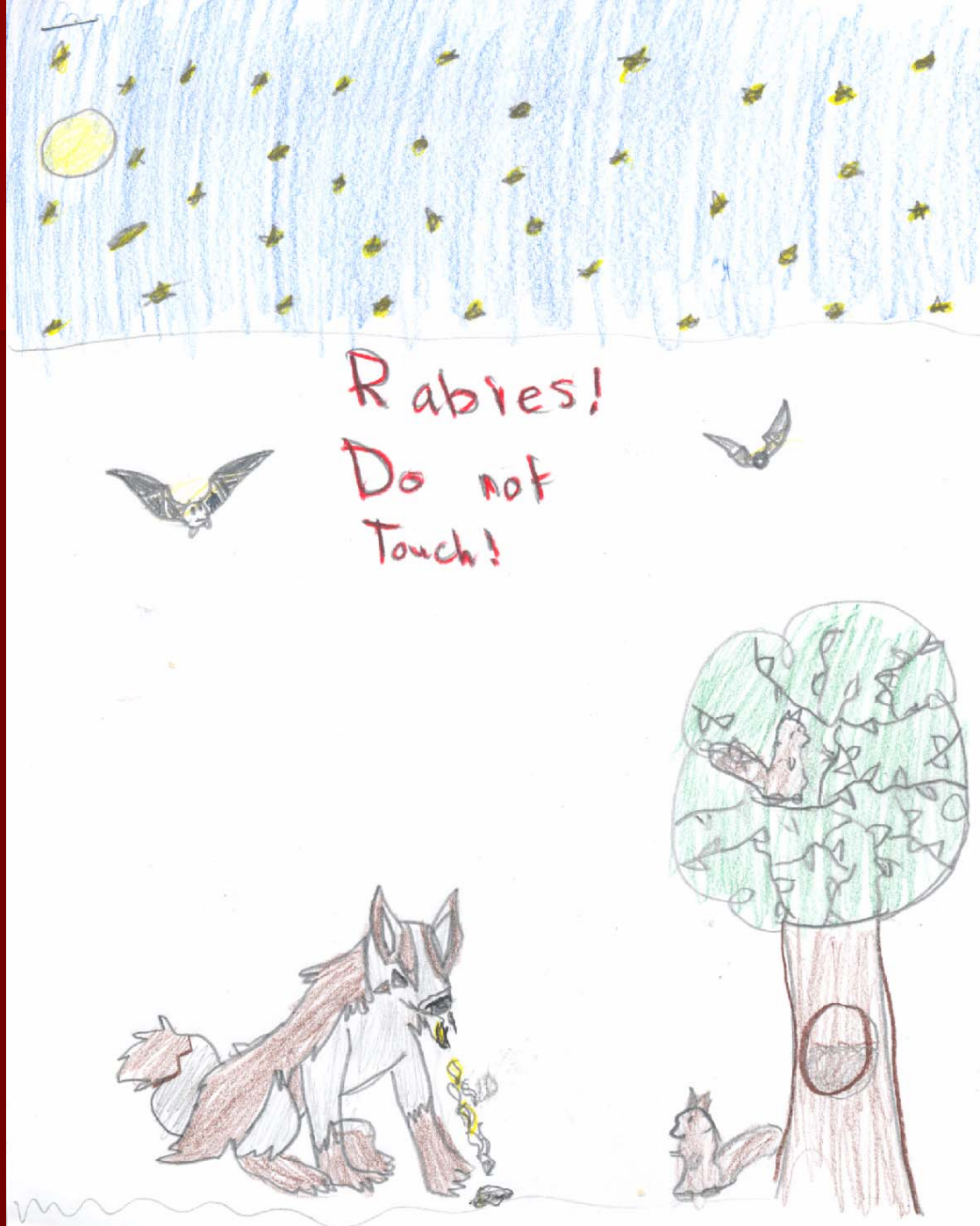
Away from

Wild

Animals!



Services



vices

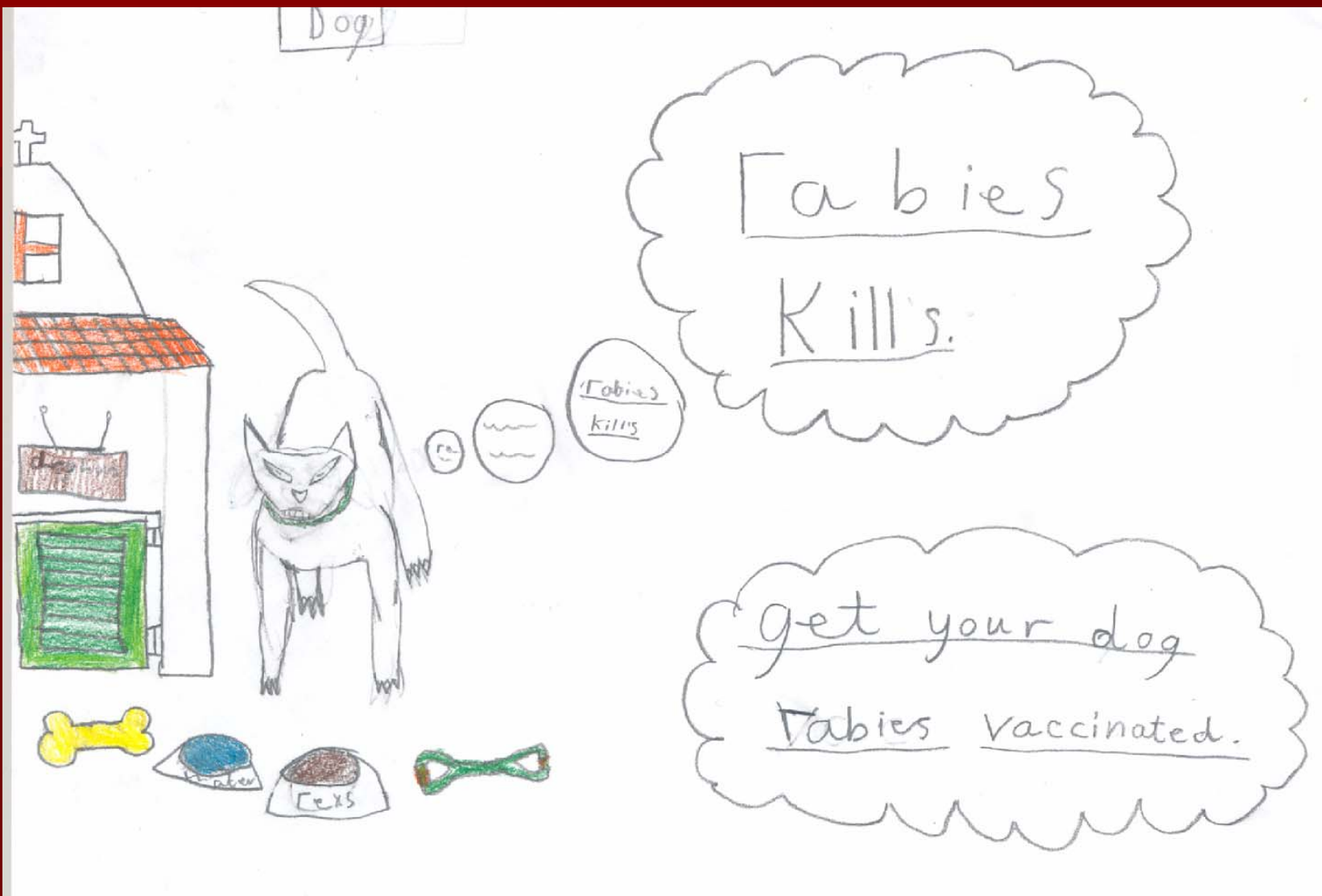
Warning  
Keep  
away from  
fox



Grendy Noriega  
8/27/07 2<sup>nd</sup> period

# Take Care of your Pets







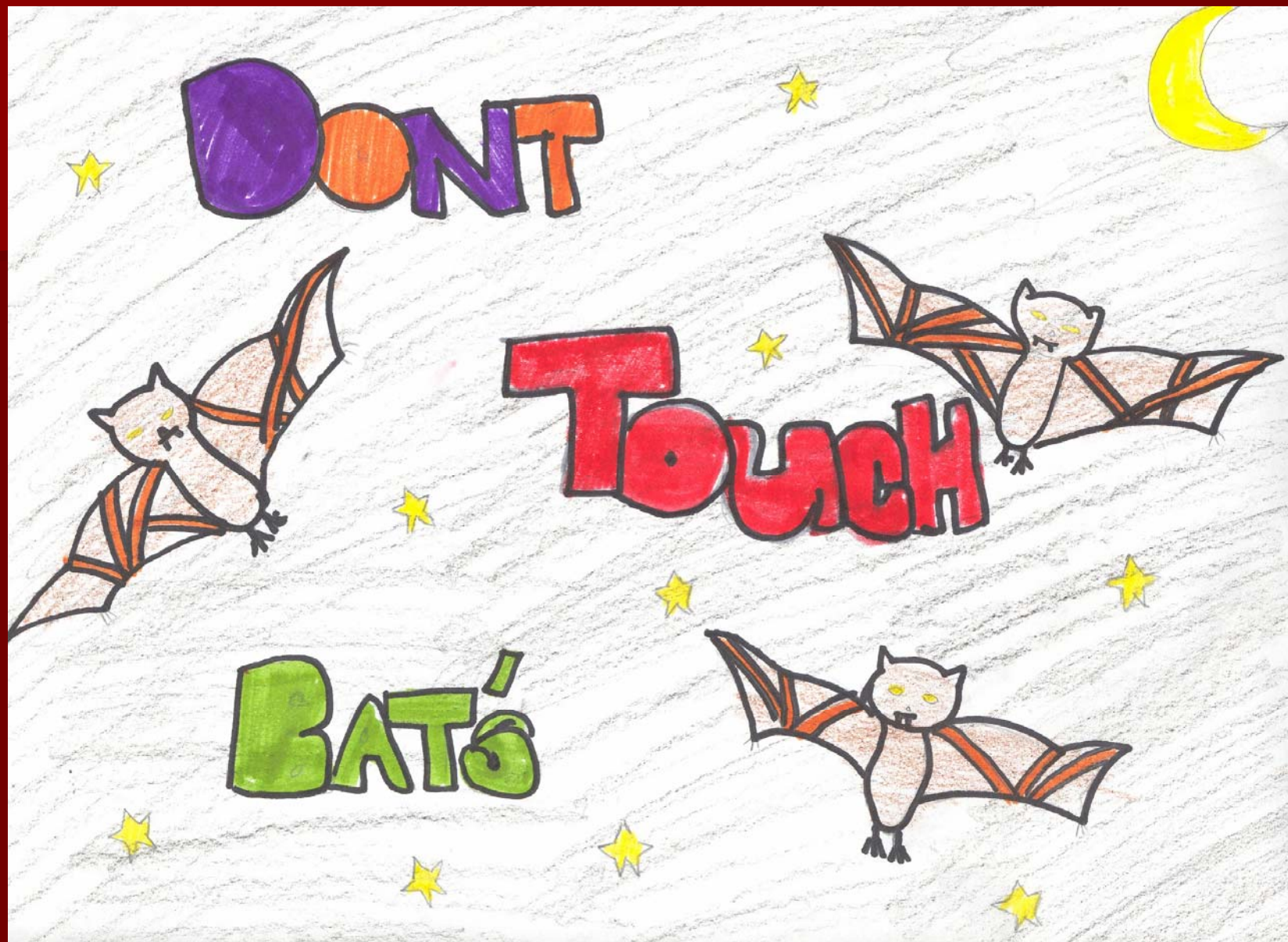
Never touch or  
Play with wild  
Foxes, skunk's, or Bats!

by: Katarina



Loza  
2nd  
grade





# Awards for Children



# Rabies Video

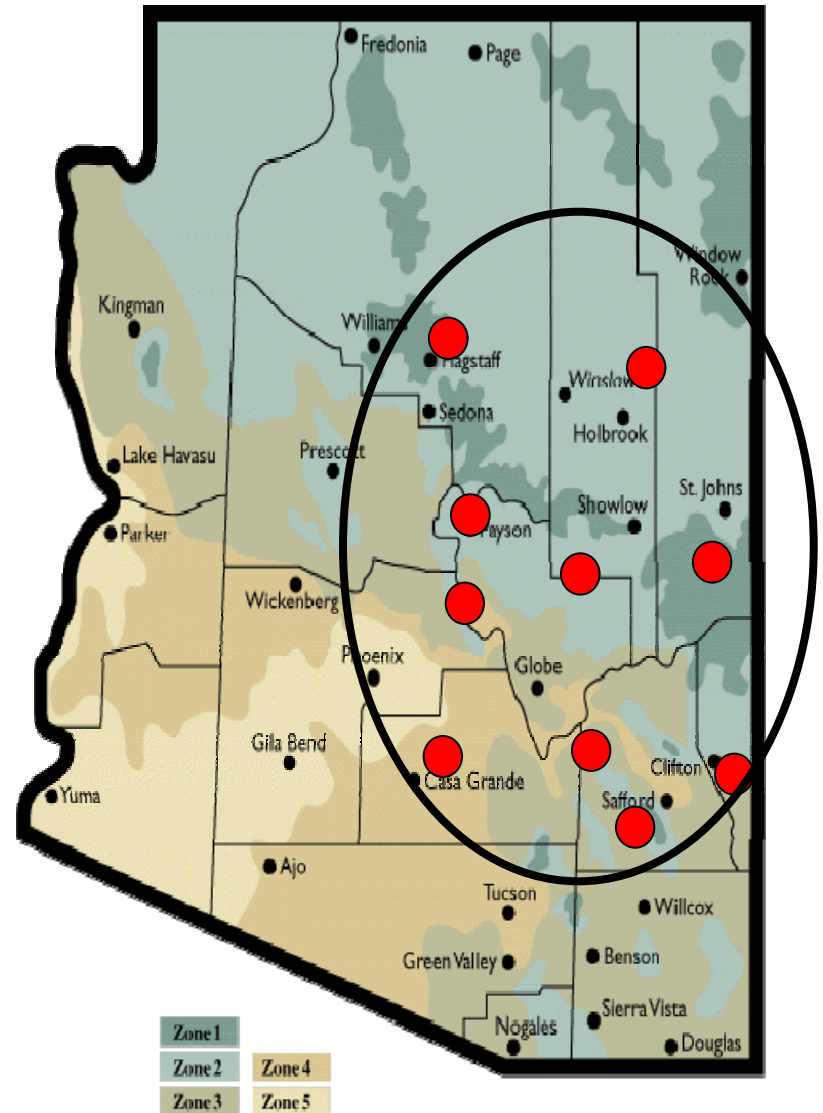
- Rabid bats found multiple times/yr by children at schools
- 5 min segment for children on what to do if find bat
- 5-10 min segment for adults on what to do if bat found at school, how to look for presence of roosting bats
- DVD/VHS- children's segment Spanish also

# Bats at Schools

- Environmental sanitarians encouraged to check for presence of roosting bats during inspection
- regulation changes being sought by state officials to include during inspection (with rodents, insects, etc.)
- Workshop- AzGFD to present

# RMSF Serosurvey of Dogs

- Serosurvey designed to evaluate geographical distribution of RMSF in AZ
- 14 Animal control and humane society shelters in northeastern and eastern AZ
- Tick collection from dogs for species ID
- Serology for rickettsial organisms
- Site visit by CDC in fall of 2005
- Results late spring 2006



# RMSF Serosurvey results

County in Arizona	≤ 32	64	128	256	# positive/ # tested	% positive
Apache	2	1	-	-	1/3	33.3%
Coconino	80	-	-	-	0/80	0%
Gila	57	1	1	-	2/59	3.4%
Graham	1	-	-	-	0/1	0%
Greenlee	33	2	2	3	7/40	17.5%
Navajo	47	2	-	1	3/50	6.0%
Pinal	25	1	-	-	1/26	3.8%
Total	245	7	3	4	14/259	5.4%

# Visit to Greenlee County



# Dermatophytosis

- 3 suspect cases seen by same dermatologist
- Patients owned pet rats purchased from major pet store chain PetCo
- Dermatologist reported cluster to Maricopa County DPH
- Fungal culture:  
*Trichophyton mentagrophytes*



# Dermatophytosis

- ADHS notified PetCo
- Fungal culture: *T. mentagrophytes*
  - Rat from one case
  - Rat at other store with flaking skin
- PetCo's continued response:
  - treated rats
  - Notified rat breeder of problem to change management
  - Adjusted educational brochure for pocket pets



# Psittacosis

- PetSmart investigation in response to multiple positive cockatiels
- Speaker from PetSmart



# Avian Influenza Preparedness

- Three tabletops & one PPE field exercise conducted
  - Jan 07: Modified TTX on Protecting Response Workers during AI in Poultry
  - Oct 07: PPE Field Exercise @ Commercial Poultry Operation
  - Oct 07: TTX on Public Health's Role in Multi Agency Response to AI in Poultry
  - Feb 08: TTX on Public Health's Role in Response to HPAI identified in Humans



## INFLUENZA (FLU)

### GUIDANCE & RECOMMENDATIONS

# Interim Guidance for Protection of Persons Involved in U.S. Avian Influenza Outbreak Disease Control and Eradication Activities

February 17, 2004

*(Antiviral drug recommendations updated January 14, 2006)*

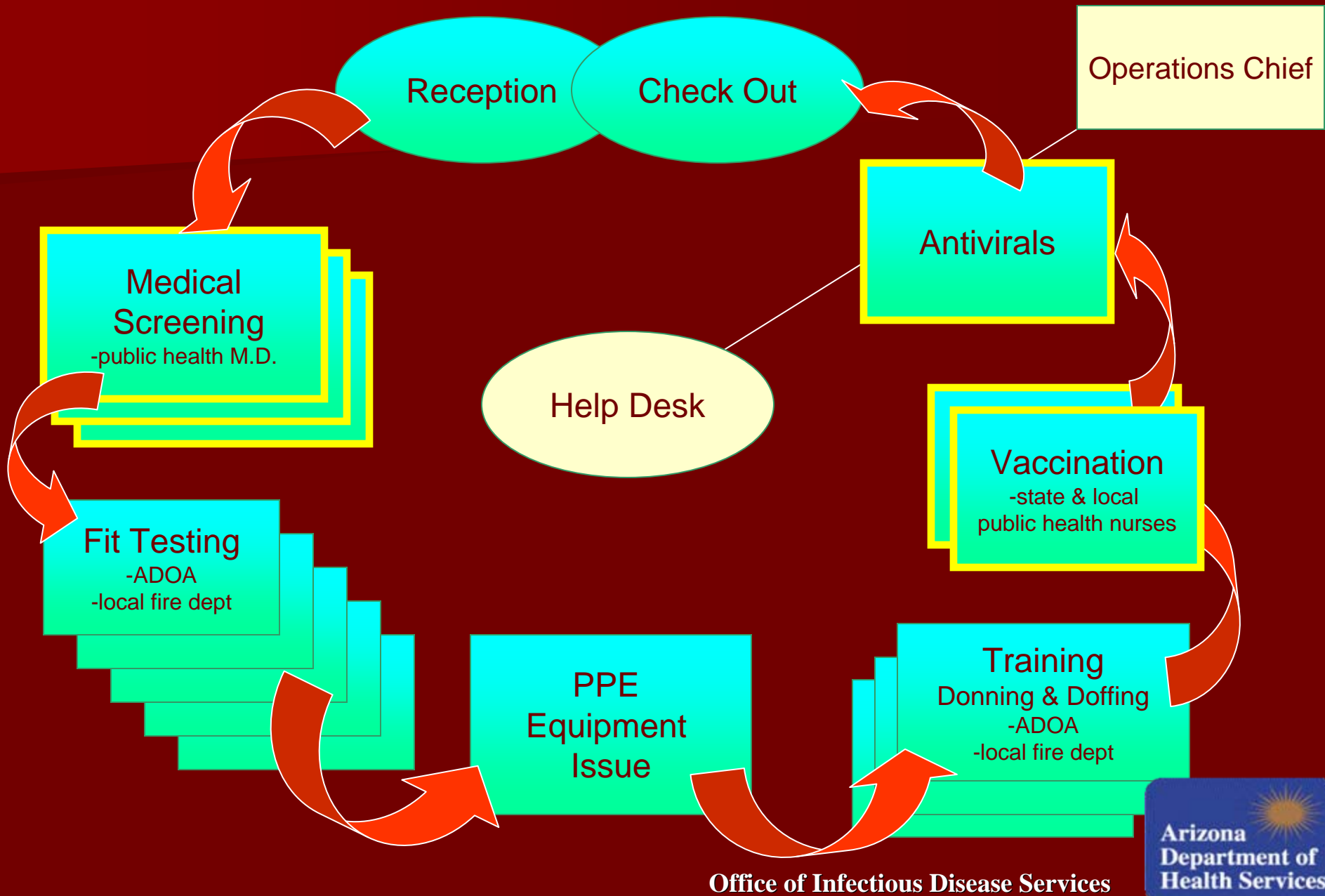
### Objective

This document provides interim guidance for protection of persons involved in activities to control and eradicate outbreaks of avian influenza among poultry in the United States. Activities that could result in exposure to avian influenza-infected poultry include euthanasia, carcass disposal, and cleaning and disinfection of premises affected by avian influenza. This interim guidance, developed in cooperation with the U.S. Department of Agriculture (USDA), should be considered complementary to avian population disease control and eradication strategies as determined by the state government, industry, or the USDA. These guidelines will be updated as necessary.

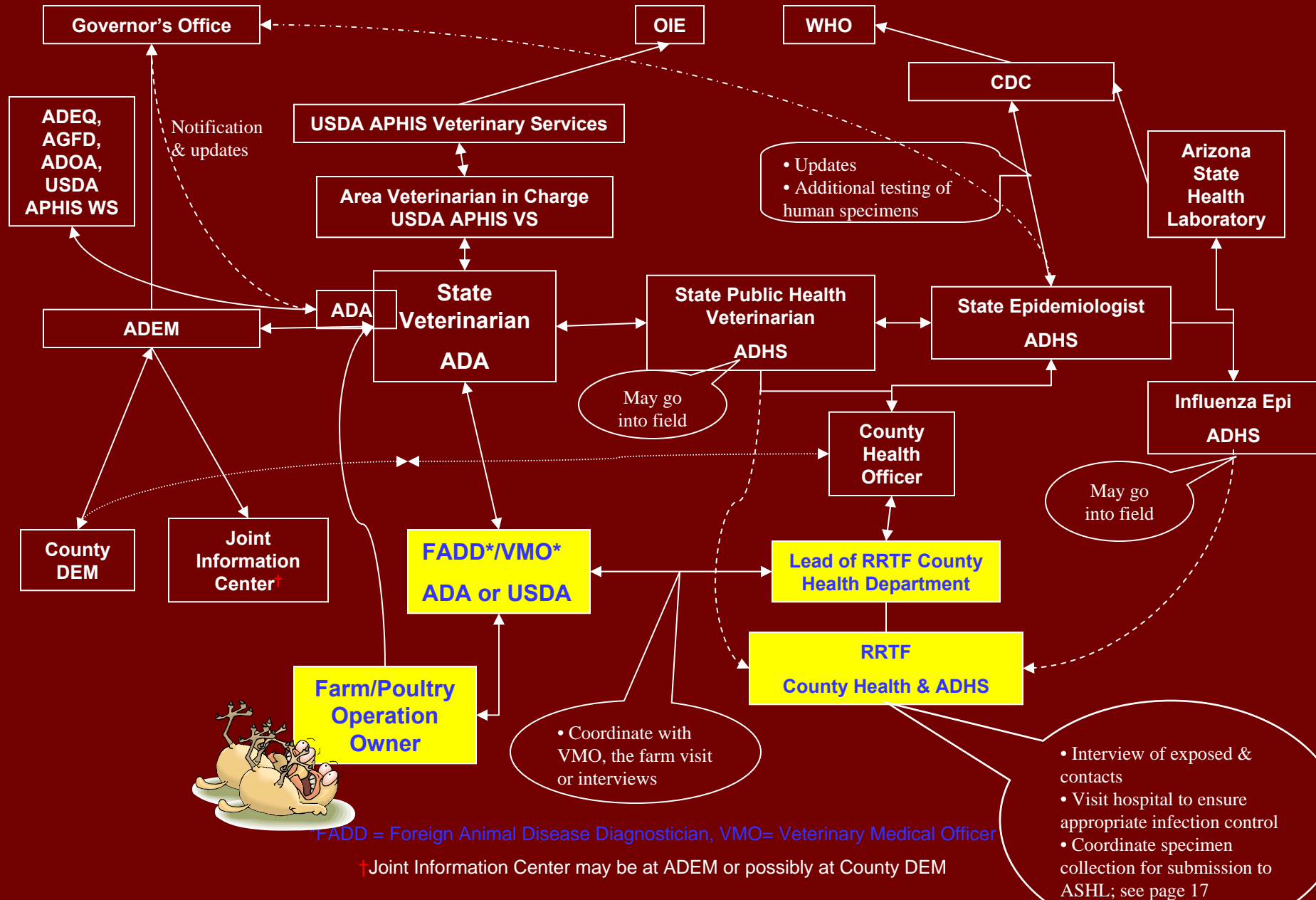
### Background: Avian Influenza

Influenza viruses that infect birds are called "avian influenza viruses" ([www.cdc.gov/flu/avian/facts.htm](http://www.cdc.gov/flu/avian/facts.htm)). These are type A influenza viruses that are genetically distinguishable from influenza viruses that usually

# Mass AI Response Worker Preparation Unit



# Communication Flow during High Path Avian Influenza in Poultry in Arizona



# Plague in Arizona: 2007



- 2007: increased activity
  - 1 human case- Apache County
  - Prairie dog colonies in Flagstaff- 2 distinct areas in eastern Flag & northeast of town
  - Owned cat in Prescott
- Additional human case in late Oct- Grand Canyon:
  - Nov. 2<sup>nd</sup>, 37 year old wildlife biologist found dead in residence at South Rim of Grand Canyon
  - USPHS & NPS investigated

# Arizona Department of Health Services

